

# Gentamicin for surgical prophylaxis

3mg/kg given ideally between 15 and 45 minutes prior to incision (maximum 60 minutes) as long as CrCl greater than 30ml/min.

Use Ideal Body Weight (IBW) or calculate an Obese Dosing Body Weight (ODBW) for patients with a BMI greater than 30 or greater than 120% of IBW. ODBW is also known as Adjusted body weight.

Gentamicin is poorly distributed in fat and using actual body weight risks overdose.

ODBW is calculated as follows:

Online:

[mdcalc.com/ideal-body-weight-adjusted-body-weight](http://mdcalc.com/ideal-body-weight-adjusted-body-weight)

Do not use calculator if patient is under 5ft or 152.5cm in height.

Or manually using the equation:

$ODBW = IBW + 0.4(\text{Actual Body Weight} - IBW)$

## Ideal body weight table

### Males

Height (ft'in)	Height (cm)	IBW (kg)	Gentamicin Dose (mg)
4'10	147	45.4	140
4'11	150	47.7	140
5'0	152.5	50.0	140
5'1	155	52.3	160
5'2	157.5	55.6	160
5'3	160	57.0	180
5'4	162.5	59.2	180
5'5	165	61.5	180
5'6	167.5	63.8	200
5'7	170	66.1	200
5'8	172.5	68.4	200
5'9	175	70.7	220
5'10	177.5	73.0	220
5'11	180	75.3	220
6'0	183	77.6	240
6'1	185.5	79.9	240
6'2	188	82.2	240
6'3	190.5	84.5	260
6'4	193	86.8	260
6'5	195.5	89.1	260
6'6	198.5	91.4	280
6'7	201	93.7	280

### Females

Height (ft'in)	Height (cm)	IBW (kg)	Gentamicin Dose (mg)
4'8	142	36.3	100
4'9	144.5	38.6	120
4'10	147	40.9	120
4'11	150	43.2	120
5'0	152.5	45.5	140
5'1	155	47.8	140
5'2	157.5	50.1	140
5'3	160	52.4	160
5'4	162.5	54.7	160
5'5	165	57.0	180
5'6	167.5	59.3	180
5'7	170	61.6	180
5'8	172.5	63.9	200
5'9	175	66.2	200
5'10	177.5	68.5	200
5'11	180	70.8	220
6'0	183	73.1	220
6'1	185.5	75.4	220
6'2	188	77.7	240

e.g. Male, 180cm, actual body weight 130 kg, BMI 40  
 IBW = 75 kg  
 $ODBW = 75 + 0.4(130-75)$   
 $ODBW = 75 + 22 = 97\text{kg}$   
 ODBW-adjusted gentamicin dose = 300mg.